

AMENDMENTS TO THE SPECIFICATION:

Please replace the paragraph on page 9 beginning on line 16 with the following amended paragraph:

Under normal operating conditions, startup procedures for the power module include employing temperature controller **29** for raising the temperature of the hydrogen storage trays to dissociate stored hydrogen from the storage media for absorption by the core. When the concentration of hydrogen in the core reaches the critical value, the reactor will generate fission energy and the core will rapidly increase in temperature. As the core temperature passes the storage temperature, the flow of hydrogen reverses and the core temperature stabilizes. Likewise, the system can be shut down by cooling these trays so the storage media will absorb hydrogen, effectively extracting hydrogen from the core. The core temperature is thereby fixed in value independent of the power extraction, allowing for beneficial load following characteristics, a system advantage.